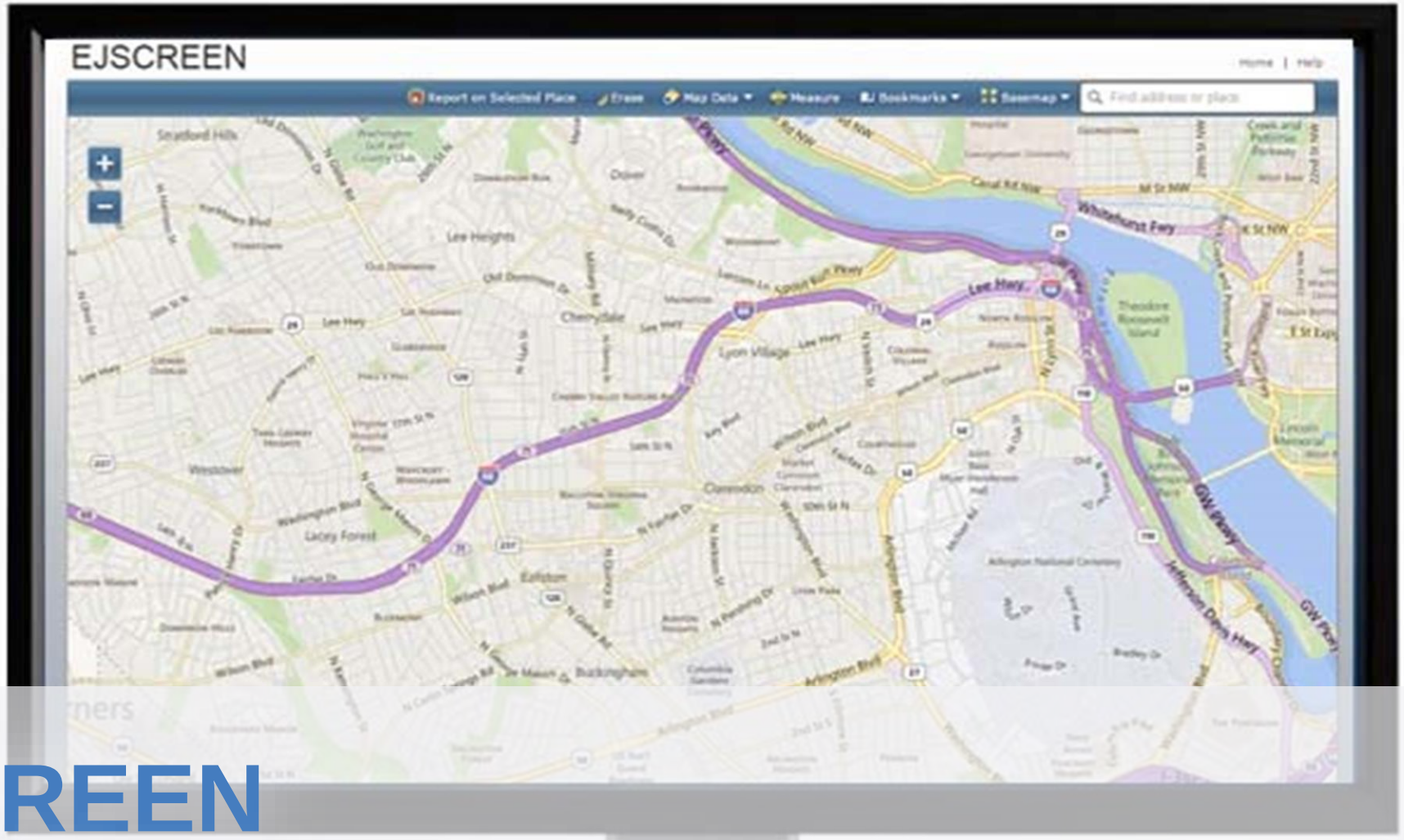


EJSCREEN
EPA's Environmental Justice Screening Tool

UNITED STATES • ENVIRONMENTAL PROTECTION AGENCY •

EJSCREEN

EPA'S ENVIRONMENTAL SCREENING TOOL

Overview of the Presentation

EJSCREEN Background

Data in EJSCREEN

EJSCREEN Maps and Reports

How is EJSCREEN Used?

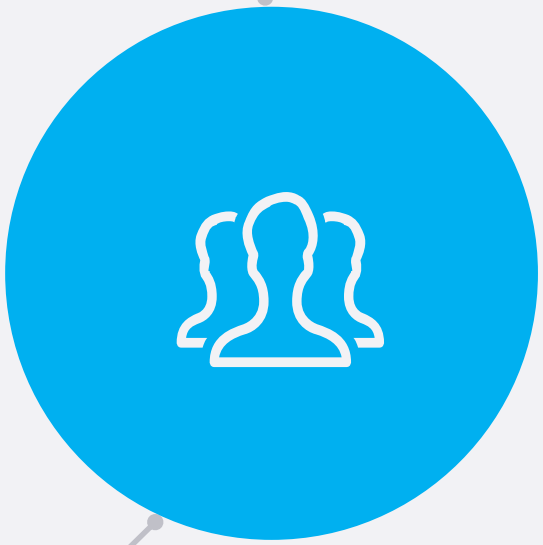
Demonstration of Features in the Tool

WHAT IS ENVIRONMENTAL JUSTICE?

About Vulnerability

distribution factors

- Race
- Ethnicity
- Social Standing
- Income
- Education

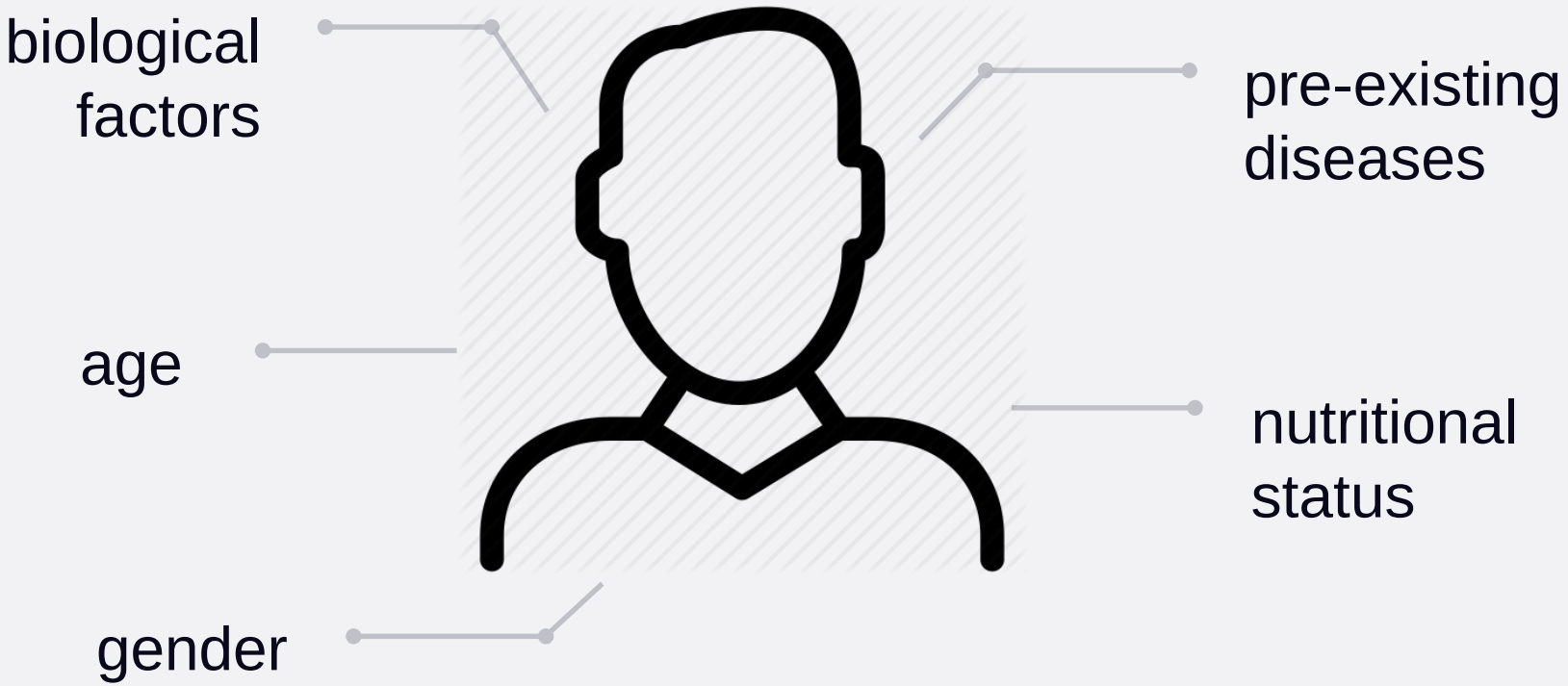


How we…

- are born
- grow
- live
- learn
- work
- play

social determinants

About Susceptibility



EJSCREEN

EJSCREEN

www.epa.gov/ejscreen

What is EJSCREEN?

- What is EJSCREEN?
  - How was It Developed?
  - How Does EPA Use It?
  - Purposes and Uses

Learn to Use EJSCREEN

- Learn to Use EJSCREEN

Launch the Tool

- Launch the EJSCREEN Tool

Understanding Results

- Understanding EJSCREEN Results
  - EJ Indexes
  - Environmental Indicators
  - Demographic Indicators
  - How to Interpret a Standard Report

Technical Information

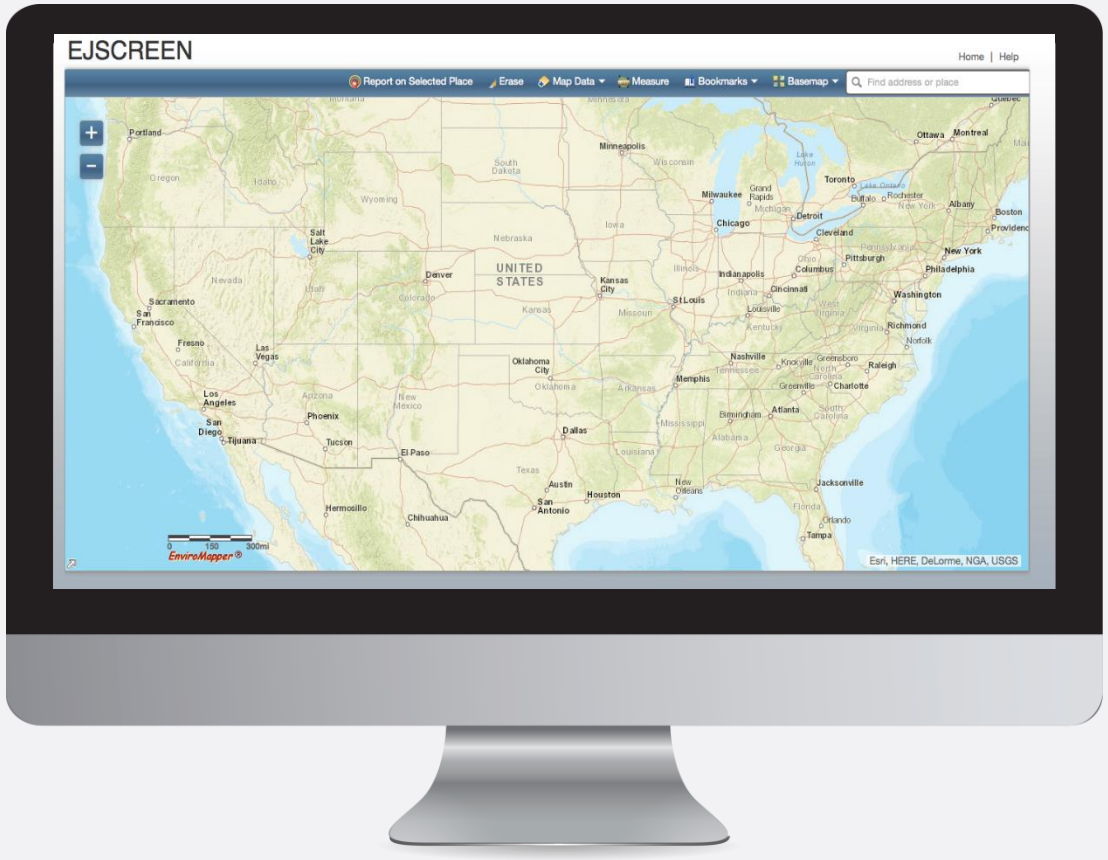
- Technical Information
  - Limitations and Caveats
  - Download EJSCREEN Data

Additional Resources

- EJSCREEN Resources
  - Frequent Questions about EJSCREEN
  - Glossary of EJSCREEN Terms
  - Other EPA Mapping Tools
  - EJSCREEN Videos

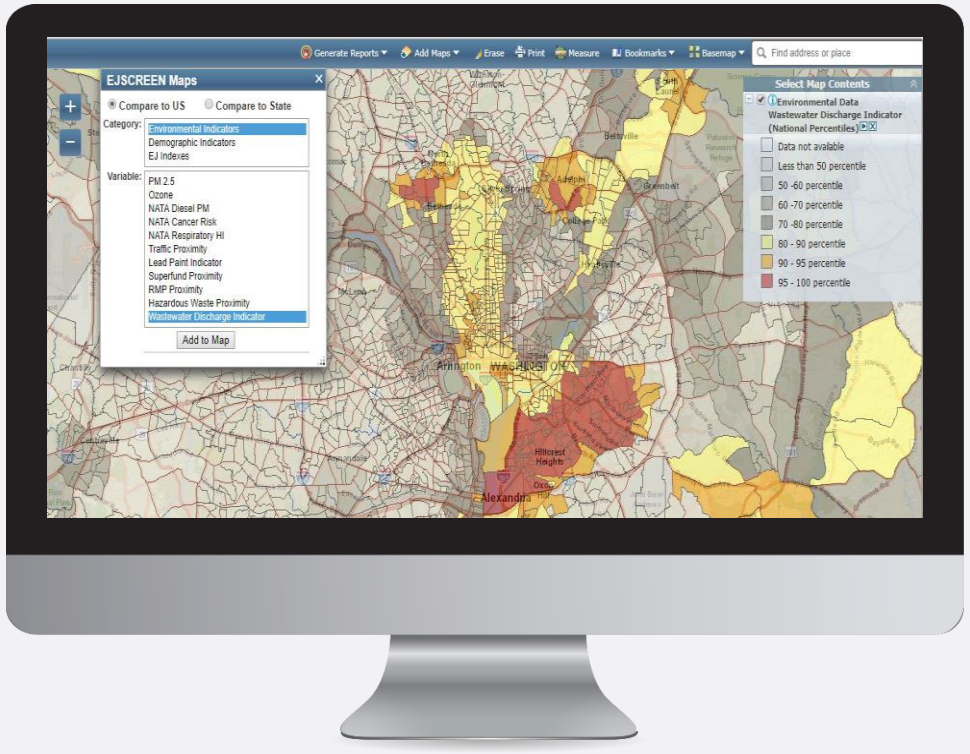
Contact Us to ask a question, provide feedback, or report a problem.

EJSCREEN Background



- EPA's new tool for EJ screening and mapping
- Web-based GIS tool and data for EPA and the public
- Plan EJ 2014 announced EPA's plan to create a new, nationally consistent EJ screening tool
- Builds upon NEJAC report on EJ screening, and prior work across EPA programs and Regions
- Incorporates comments from peer letter reviews by experts on geospatial tools and EJ
- Input from Regions
- Build upon previous EJ screening tools (e.g. EJView)

Key Features in EJSCREEN



Wastewater discharge indicator

- 12 different environmental indicators
- Updated demographics ACS– every 1 year, not every 10 years
- A consistent, quantified approach to EJ
- Accessible and transparent to anyone with a web browser -> http://www2.epa.gov/ejscreen
- Standard printable reports and bar graphs
- Block groups rather than census tracts or counties.
- A wealth of additional data maps; can add more from the Web
- Raw data downloads are also available

Understand these caveats before using

- Environmental indicators are mostly screening-level proxies for actual exposure or risk.
- Indicators vary. Estimates are based on historical data and may not reflect current or future conditions.
- EJSCREEN does not cover all environmental issues.
- EJSCREEN does not identify “EJ communities.”

EJSCREEN
Data

UNITS OF ANALYSIS

United States

State

Primary governmental divisions of the United States.

County

Largest divisions within states.

Census Tract

Collection of Census block groups, mostly between 1,200 and 8,000 people.

Block Group

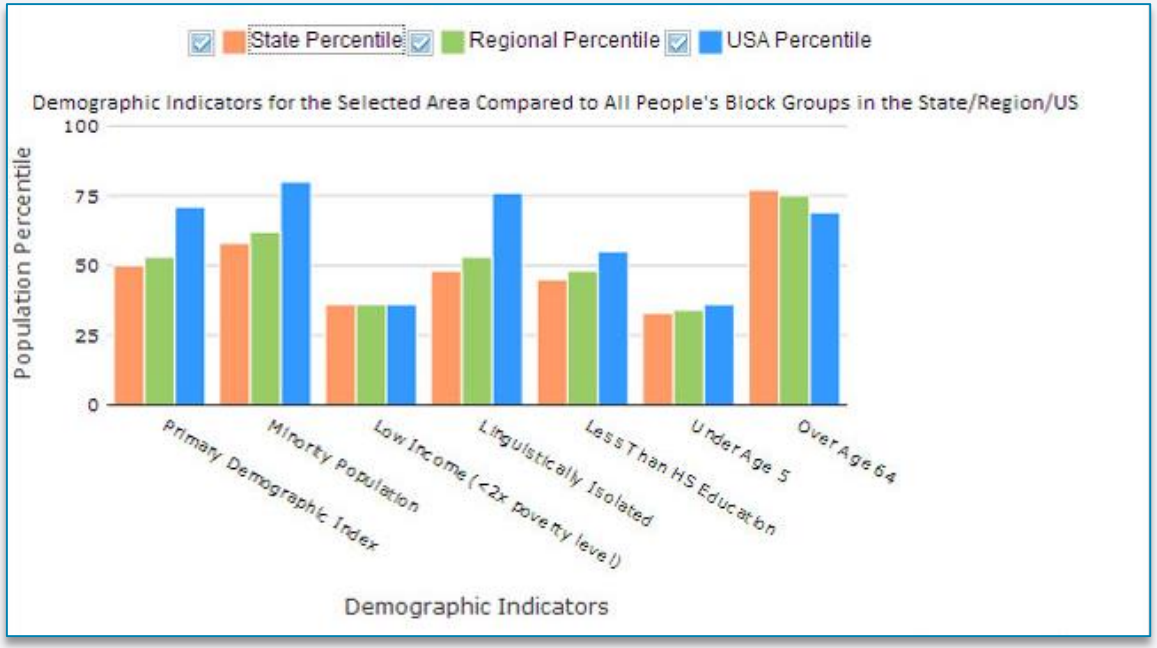
Collection of residential blocks, mostly, between 600 and 3,000 people.

Block

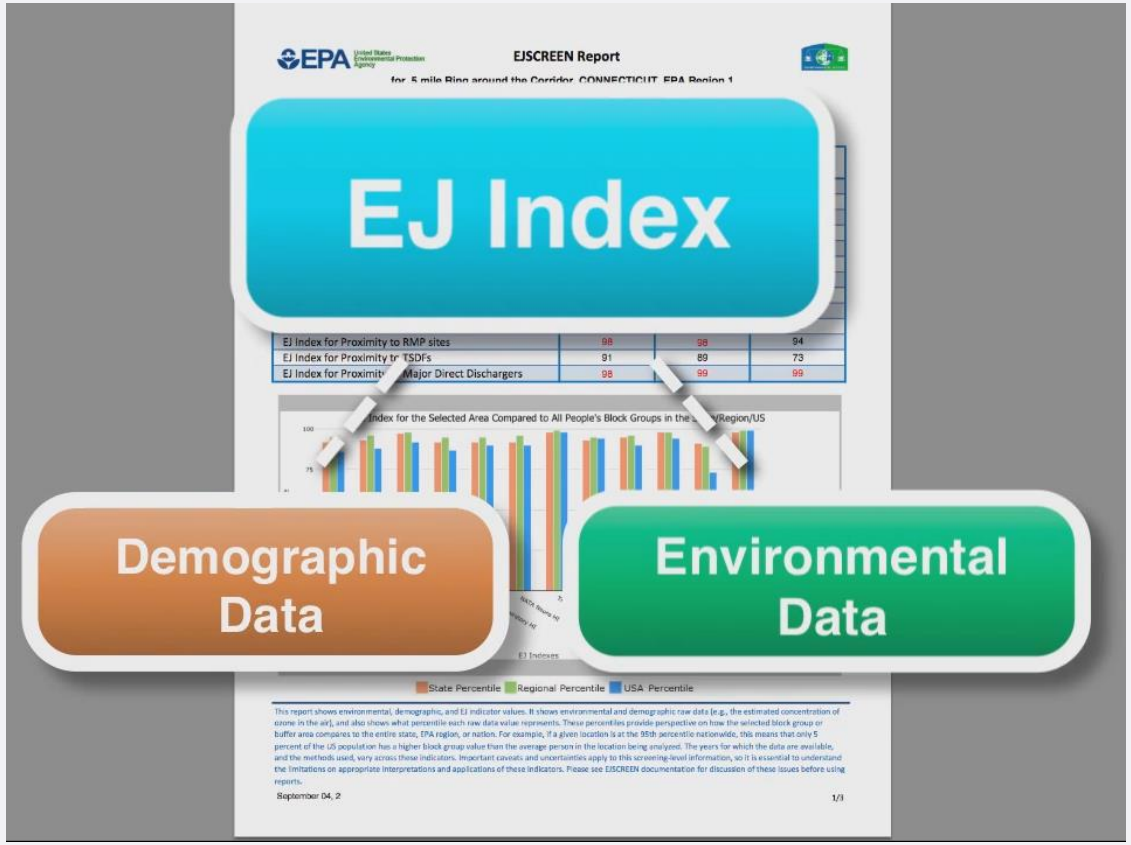
Residential block, bounded on all sides by streets.

Results are ranked as percentiles

- Percentiles put indicators into common units of 0 – 100.
- For example, a place at the 80th percentile nationwide means 20% of the US population has a higher value.
- Ranking values as percentiles allows comparison of indicators measured with different units. It does not mean the risks are equal or comparable.



EJ Indexes



EJ indexes combine **environmental** and **demographic** data to highlight areas where vulnerable/susceptible populations may be disproportionately impacted by pollution.

Click here to watch a 5 minute video on how the EJ Indexes are constructed.

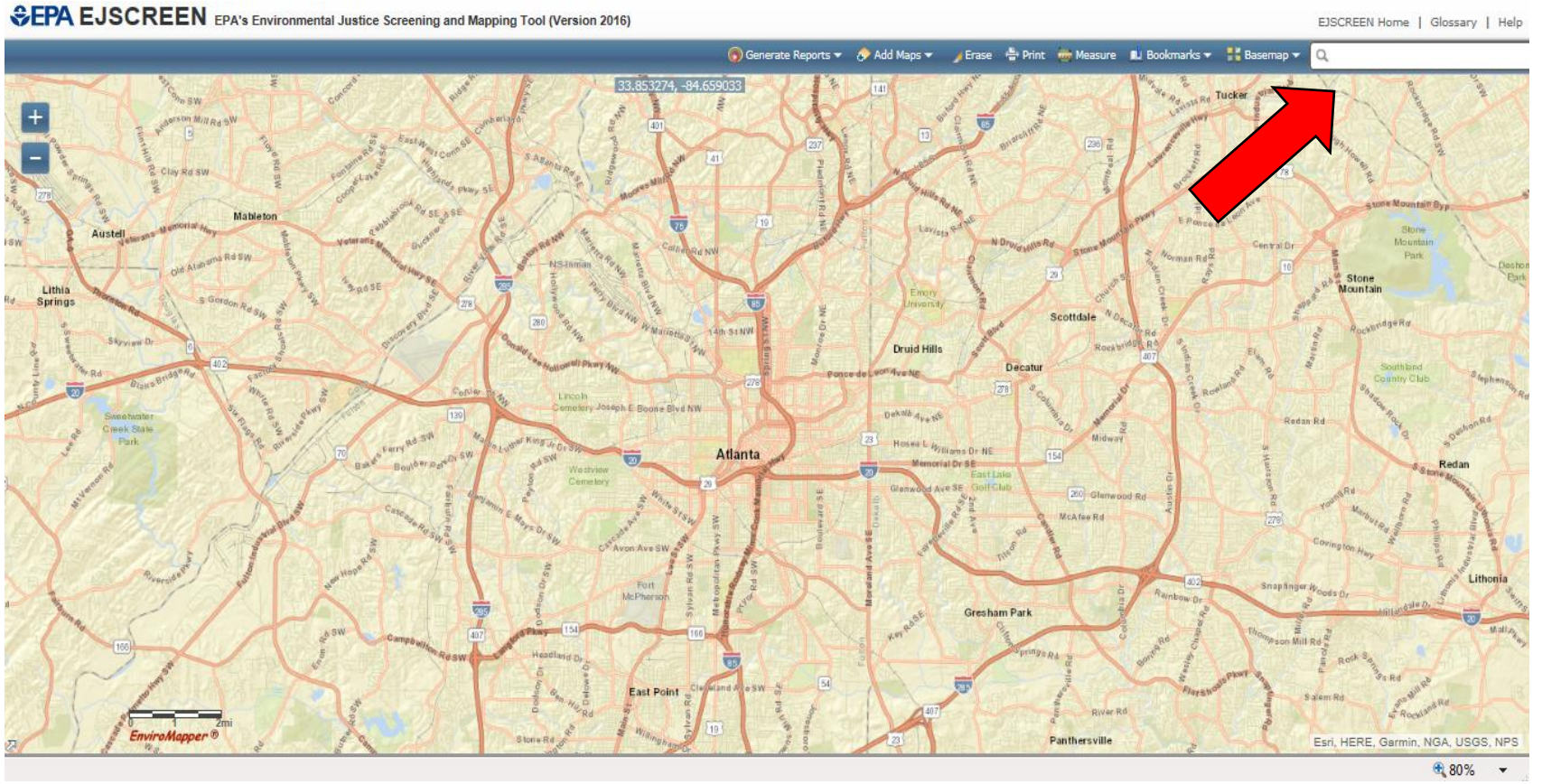
EJSCREEN DEMONSTRATION

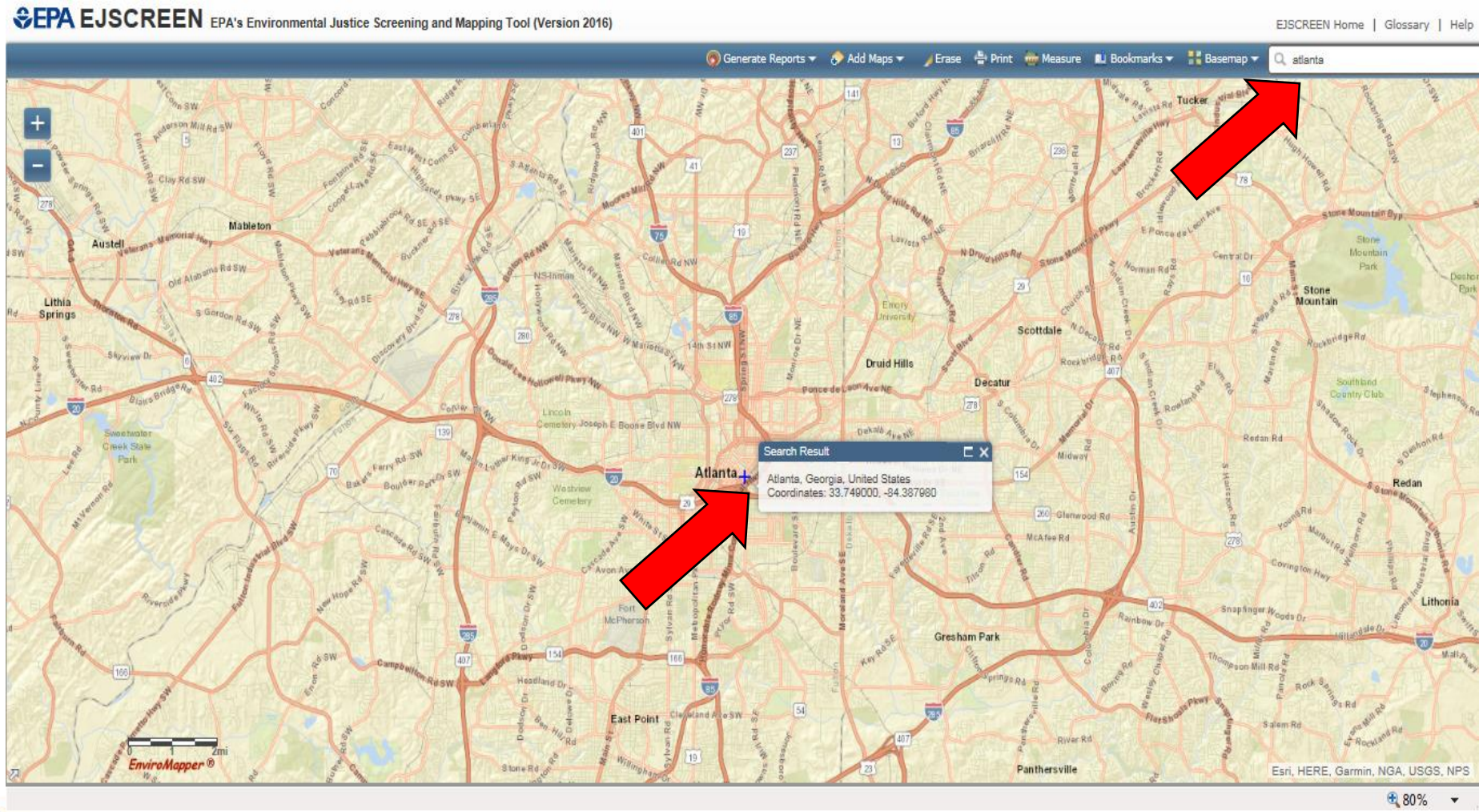
SCENARIO

Your organization is submitting a $1 million proposal to the City of Louisville. The grant will allow your organization to provide educational services for learners from Pre-K through college. This project is aimed at closing the achievement gap and creating a holistic, supportive educational experience for all.

Use EJSCREEN to develop a project proposal that identifies the community environmental health concerns that should be considered for the project.

Task 1: INPUT YOUR ADDRESS

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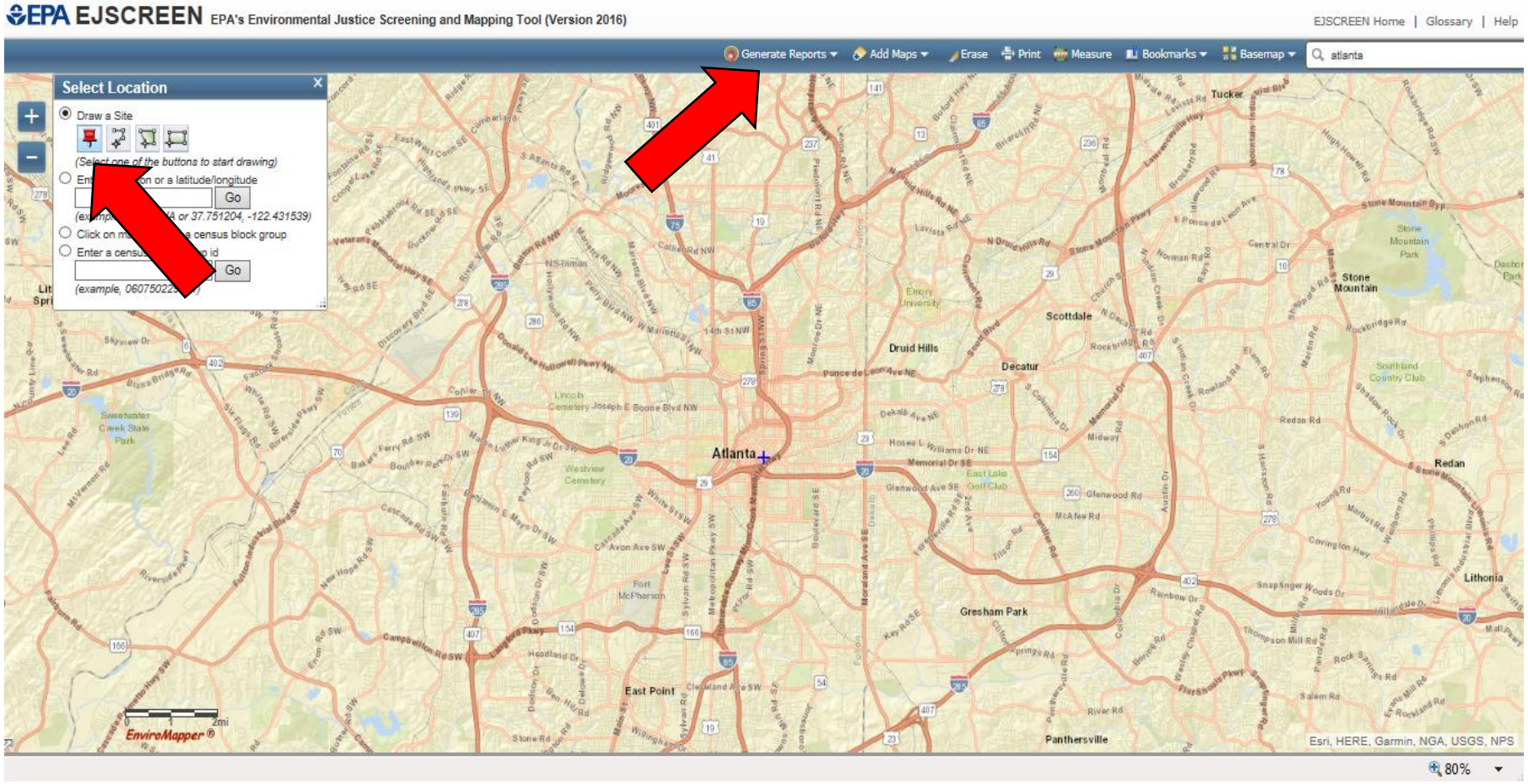
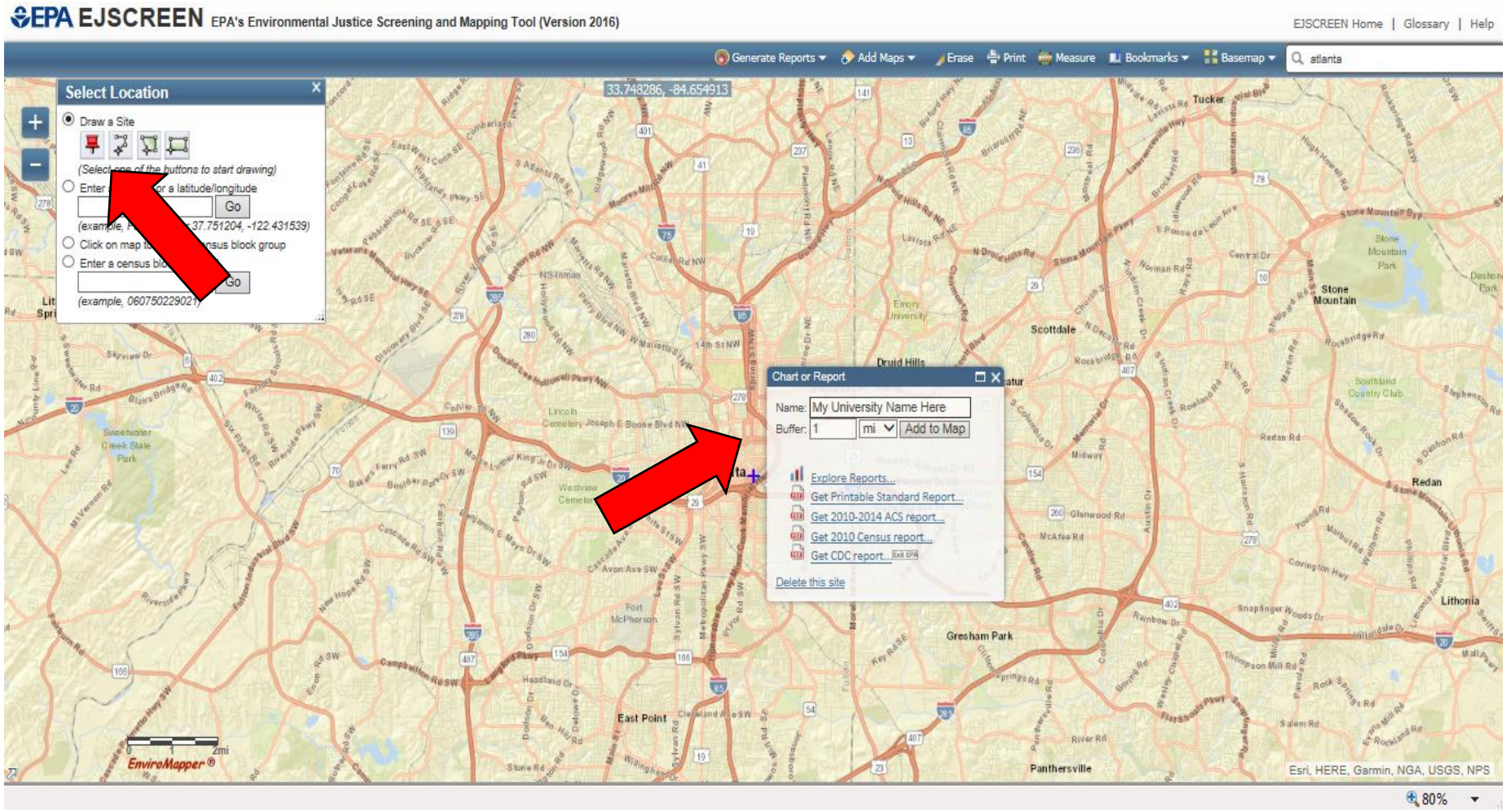
Generate Reports
Add Maps
Erase
Print
Measure
Bookmarks
Basemap
atlanta
Search Result
Atlanta, Georgia, United States
Coordinates: 33.749000, -84.387980
Atlanta
Tucker
Stone Mountain
Scottdale
Decatur
Druid Hills
Redan
Lithonia
Gresham Park
East Point
Panthersville
Austell
Mableton
Lithia Springs
EnviroMapper
Esri, HERE, Garmin, NGA, USGS, NPS
80%

Task 2:GENERATE A REPORT

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Basemap
atlanta
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Draw a Site
(Select one of the buttons to start drawing)
Enter a latitude/longitude
Go
Click on map to
census block group
Enter a census blo
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(example, 060750229021)
33.748286, -84.654913
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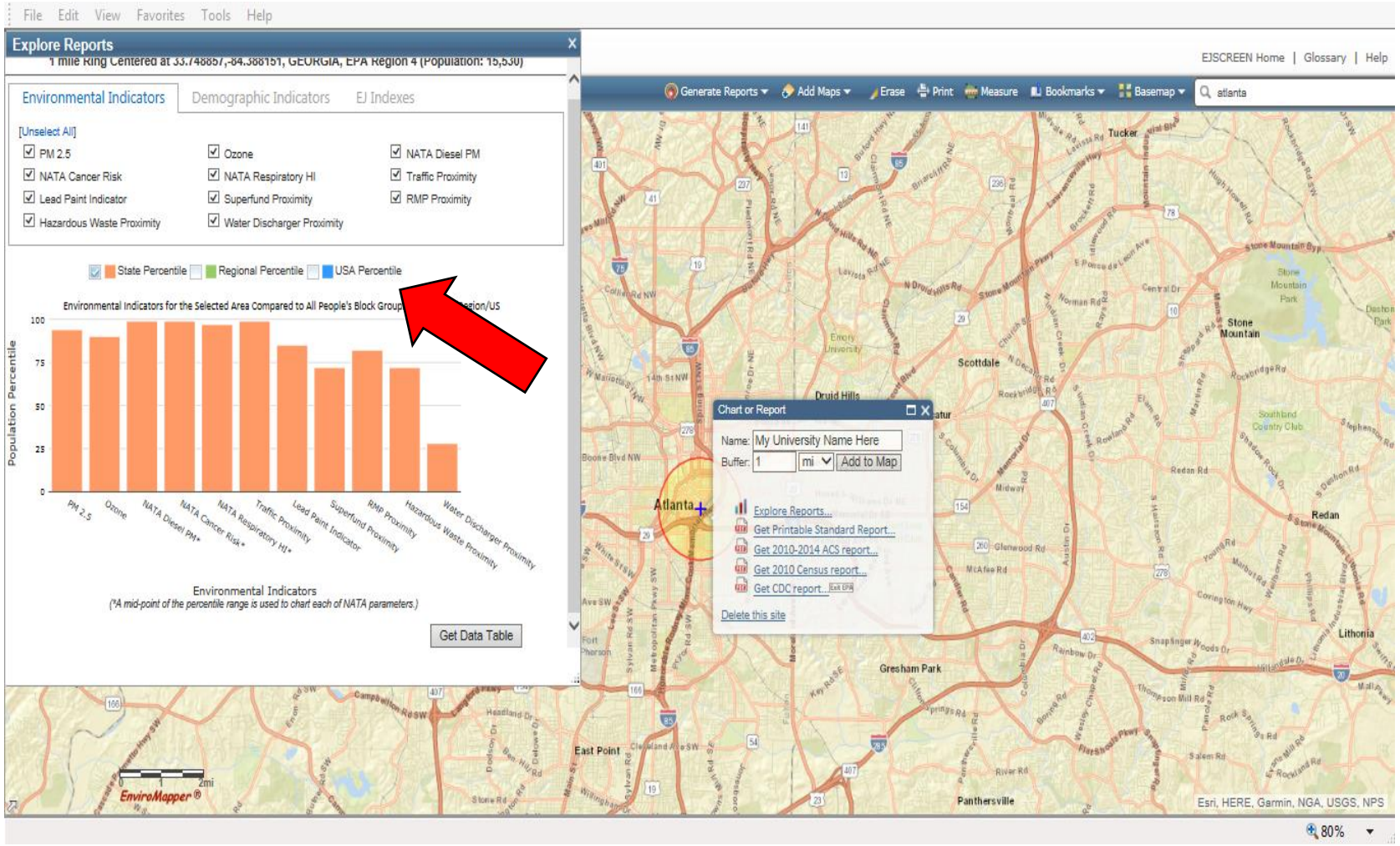
Get Printable Standard Report...
Get 2010-2014 ACS report...
Get 2010 Census report...
Get CDC report...
Delete this site
Tucker
Stone Mountain
Scottdale
Druid Hills
Redan
Lithonia
Gresham Park
East Point
Panthersville
Esri, HERE, Garmin, NGA, USGS, NPS
EnviroMapper
80%


File Edit View Favorites Tools Help
Explore Reports
Environmental Indicators
Demographic Indicators
EJ Indexes
[Unselect All]
PM 2.5
Ozone
NATA Diesel PM
NATA Cancer Risk
NATA Respiratory HI
Traffic Proximity
Lead Paint Indicator
Superfund Proximity
RMP Proximity
Hazardous Waste Proximity
Water Discharger Proximity
State Percentile
Regional Percentile
USA Percentile
Population Percentile
Environmental Indicators
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Get Printable Standard Report...
Get 2010-2014 ACS report...
Get 2010 Census report...
Get CDC report...
Delete this site
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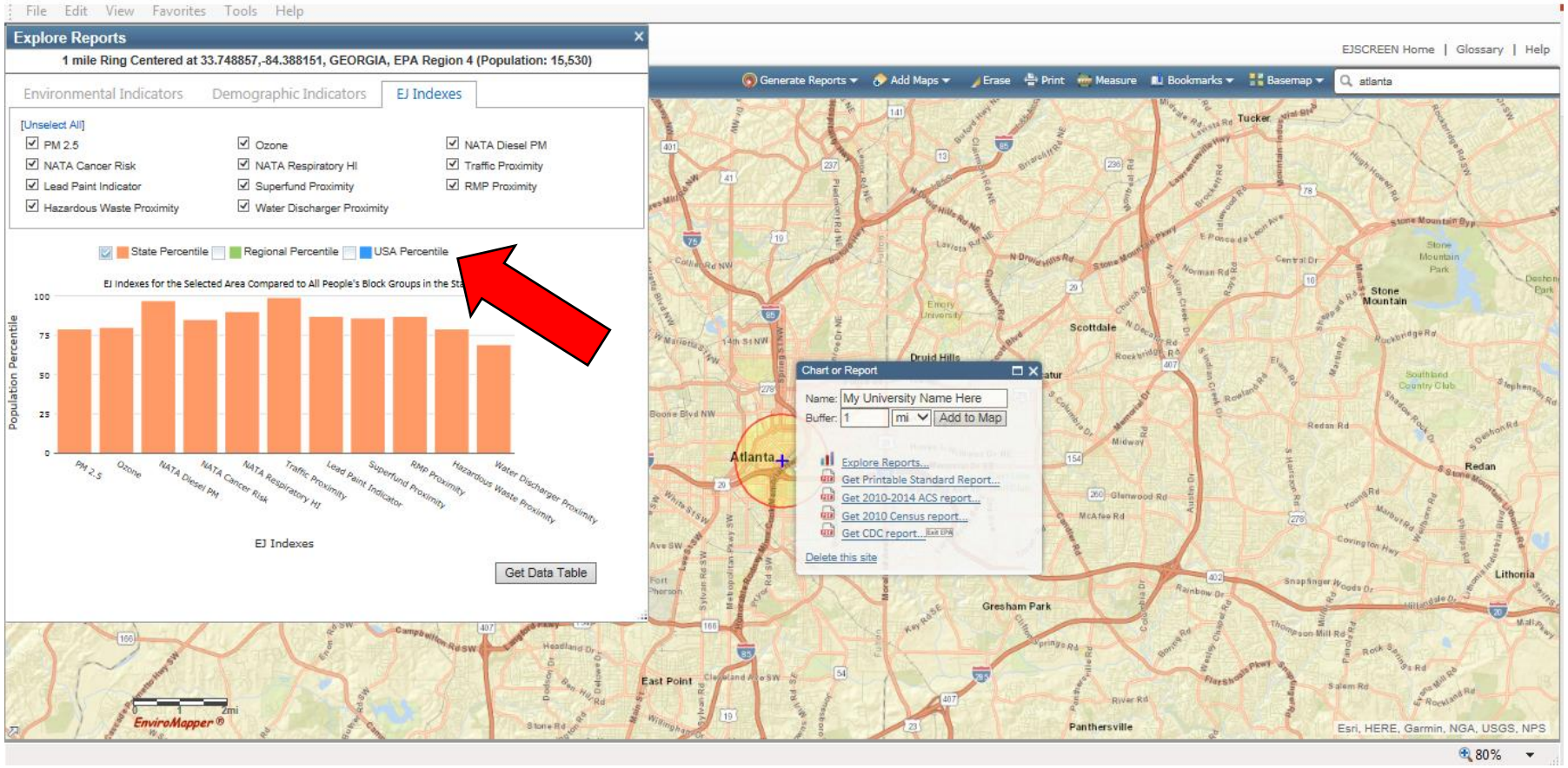
Tucker
Scottdale
Stone Mountain
Redan
Lithonia
Gresham Park
East Point
Panthersville
EnviroMapper
Esri, HERE, Garmin, NGA, USGS, NPS
80%

QUESTION 1

Collect the following information from the report:
Environmental Indicators Above 80th Percentile


File Edit View Favorites Tools Help
Explore Reports
1 mile Ring Centered at 33.748857,-84.388151, GEORGIA, EPA Region 4 (Population: 15,530)
Environmental Indicators
Demographic Indicators
EJ Indexes
[Unselect All]
PM 2.5
Ozone
NATA Diesel PM
NATA Cancer Risk
NATA Respiratory HI
Traffic Proximity
Lead Paint Indicator
Superfund Proximity
RMP Proximity
Hazardous Waste Proximity
Water Discharger Proximity
State Percentile
Regional Percentile
USA Percentile
EJ Indexes for the Selected Area Compared to All People's Block Groups in the St
Population Percentile
EJ Indexes
Get Data Table
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Scottdale
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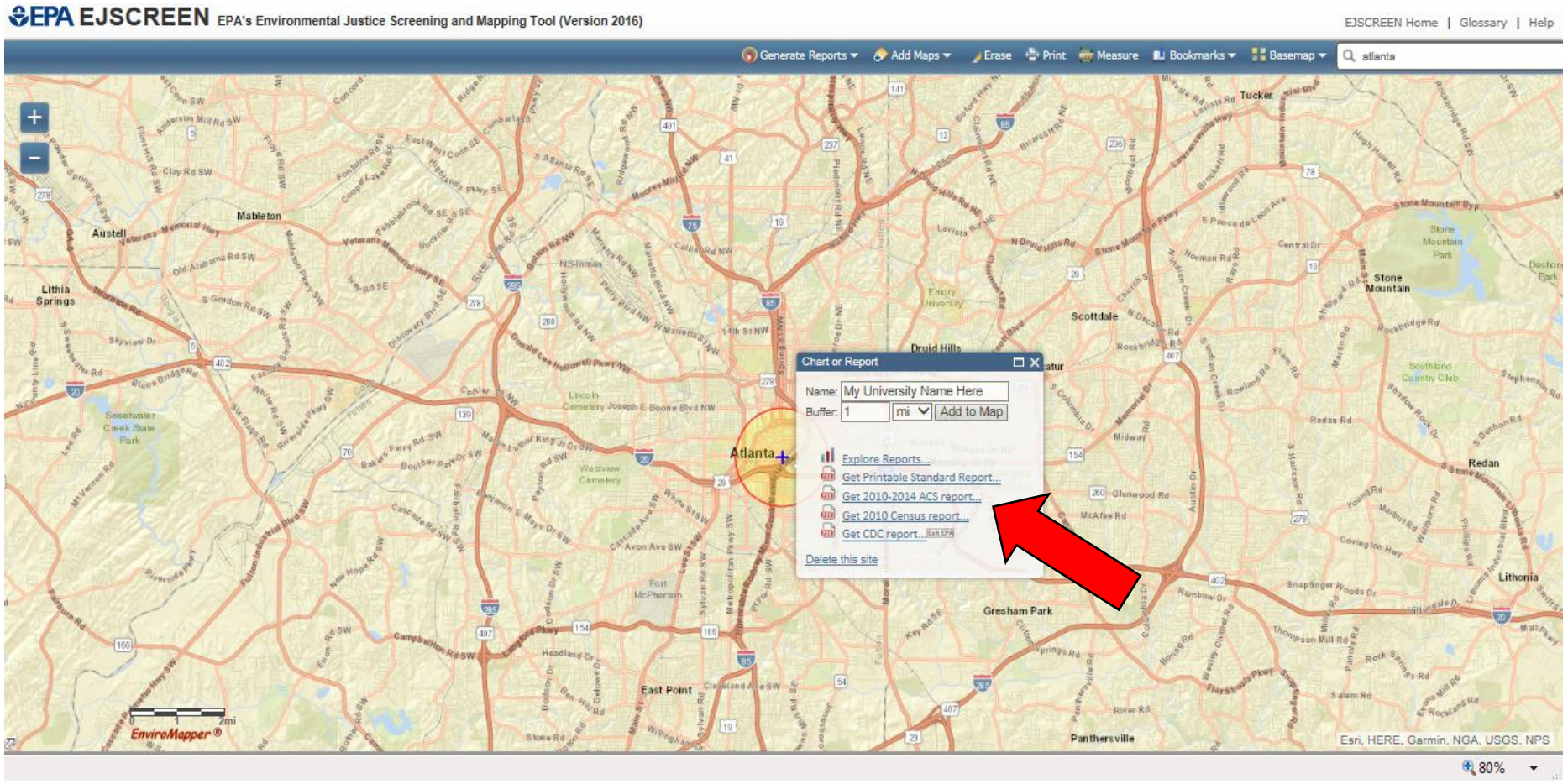
Lithonia
Gresham Park
East Point
Panthersville
EnviroMapper
Esri, HERE, Garmin, NGA, USGS, NPS
80%

QUESTION 3

Collect the following information from the report:

EJ Indexes Above 80th Percentile

Task 3:GENERATE ACS Report



Task 3:GENERATE ACS Report

EJSCREEN ACS Summary Report

Location: User-specified point center at 33.748857, -84.388151
Ring (buffer): 1-mile radius
Description: My University Name Here

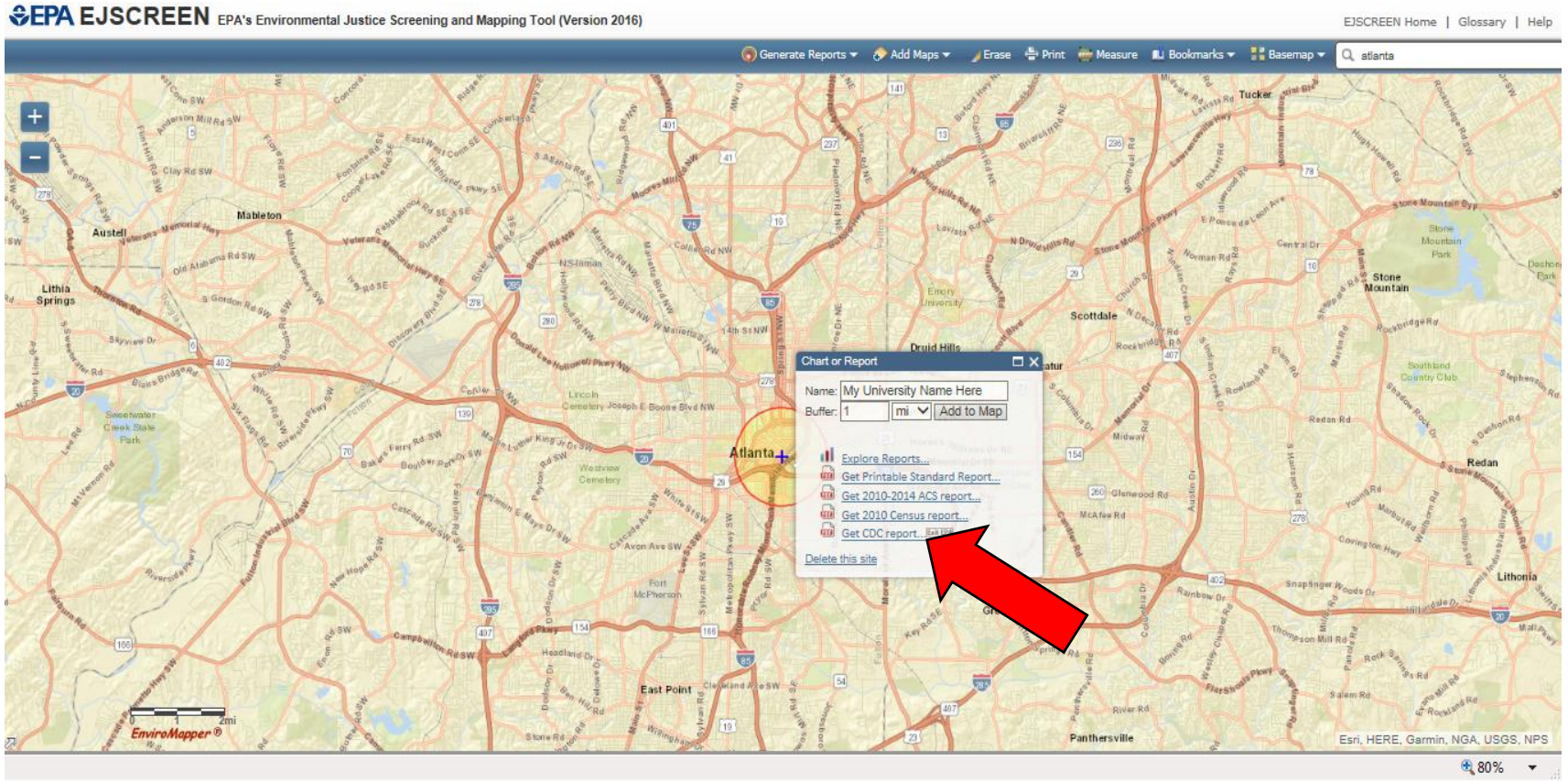
Summary of ACS Estimates	2010 - 2014
Population	15,530
Population Density (per sq. mile)	5,011
Minority Population	11,072
% Minority	71%
Households	6,577
Housing Units	8,248
Housing Units Built Before 1950	1,952
Per Capita Income	23,880
Land Area (sq. miles) (Source: SF1)	3.10
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	0.00
% Water Area	0%

QUESTION 4

As part of your application, the City requires you to conduct a bi-lingual community survey that ranks local needs.

Use the ACS report to explain which language you chose.

Task 4:GENERATE CDC Report



Air Quality: Particulate Matter†

Air pollution is a leading environmental threat to human health. Particles in the air like dust, dirt, soot, and smoke are one kind of air pollution called particulate matter. Fine particulate matter, or $PM_{2.5}$, is so small that it cannot be seen in the air. Breathing in $PM_{2.5}$ may

- lead to breathing problems,
- make asthma symptoms or some heart conditions worse, and
- lead to low birth weight.

The national standard for annual $PM_{2.5}$ levels is **12.0µg/m³**. When $PM_{2.5}$ levels are above 12, this means that air quality is more likely to affect your health.

In 2012, the annual level of $PM_{2.5}$ in **Queens County** was **8.6µg/m³**. *

* Micrograms per cubic meter (µg/m³)

ANNUAL AMBIENT CONCENTRATION OF $PM_{2.5}$

8.6µg/m³*

Queens County, New York

12.0µg/m³*

Annual National Standard

*Micrograms Per Cubic Meter (µg/m³)

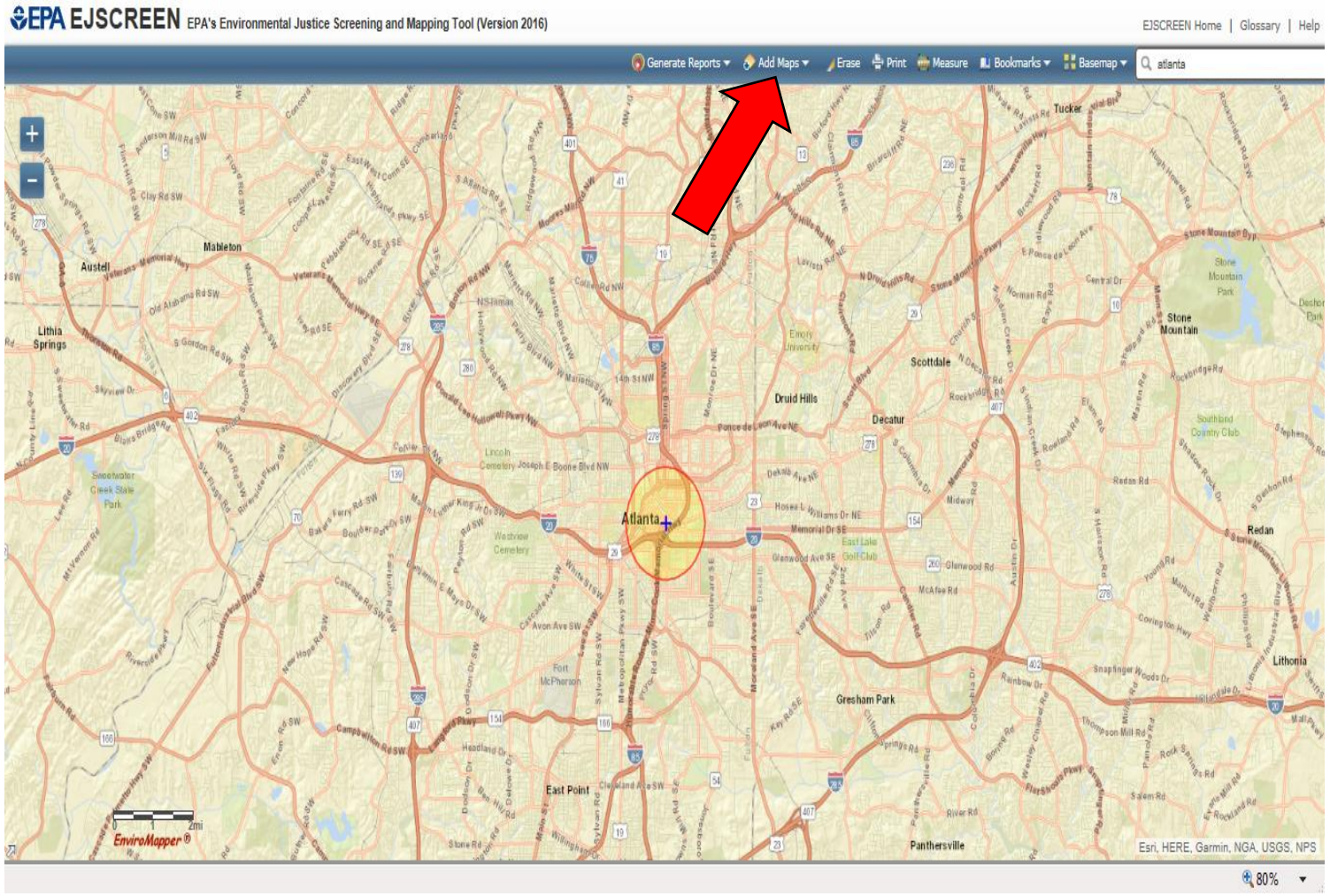
Discover the data | Learn more about this topic

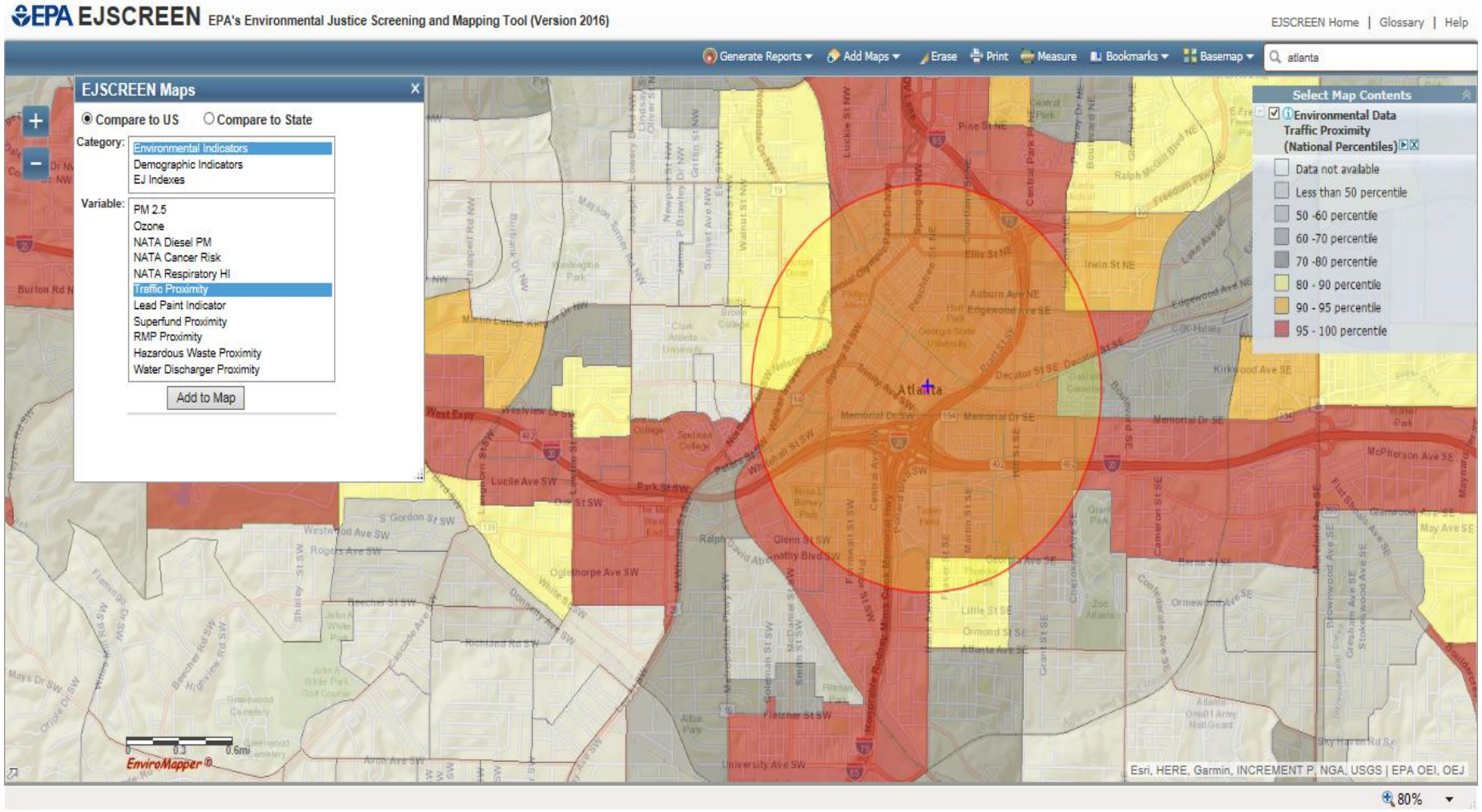
† 2012 data from the National Environmental Public Health Tracking Network

QUESTION 5

Specific Population Health Concern.

Task5: Add Maps

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EJSCREEN Maps
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Compare to State
Category:
Environmental Indicators
Demographic Indicators
EJ Indexes
Variable:
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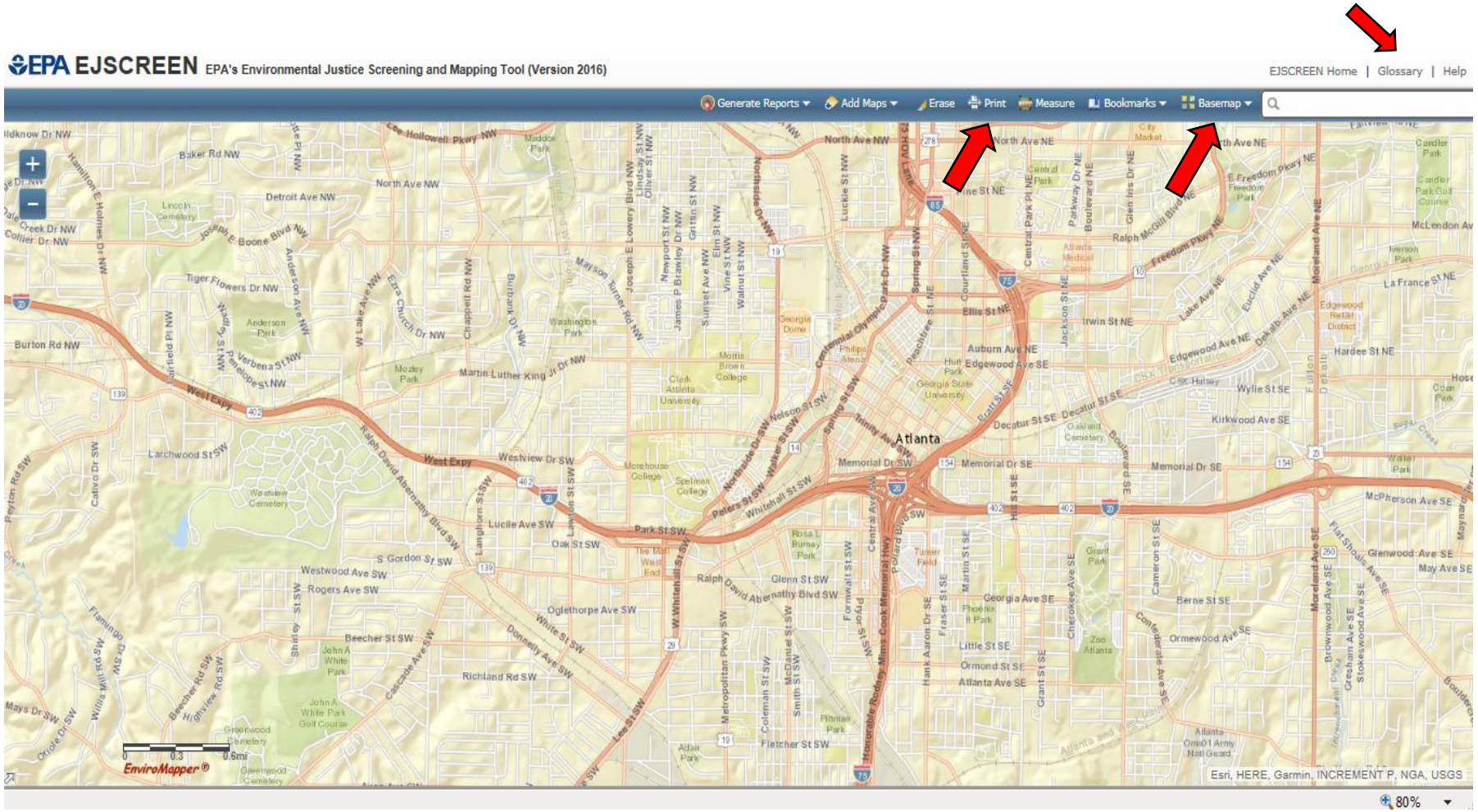
Ozone
NATA Diesel PM
NATA Cancer Risk
NATA Respiratory HI
Traffic Proximity
Lead Paint Indicator
Superfund Proximity
RMP Proximity
Hazardous Waste Proximity
Water Discharger Proximity
Add to Map
Select Map Contents
Environmental Data
Traffic Proximity
(National Percentiles)
Data not available
Less than 50 percentile
50 -60 percentile
60 -70 percentile
70 -80 percentile
80 - 90 percentile
90 - 95 percentile
95 - 100 percentile
Atlanta
EnviroMapper
Esri, HERE, Garmin, INCREMENT P, NGA, USGS | EPA OEI, OEJ
80%

QUESTION 6

What is the traffic proximity in your location? Suggest one way this value might impact the expansion project.

EJSCREEN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Atlanta
EnviroMapper®
Esri, HERE, Garmin, INCREMENT P, NGA, USGS
80%

Contact Information

Questions?

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Region 4, Office of Environmental Justice and Sustainability

Good.Sheryl@epa.gov

404-562-9559